**Appendix B**. Models constants obtained from each equation for each solute system (dyes).

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **System No.\*** | **Model** | **Models coefficients** | | | | | | | | |
| **A** | **B** | **C** | **D** | **E** | **F** | **a** | **b** | **k** |
| 1 | Chrastil | 20.44 | -7057 |  |  |  |  |  |  | 5.225 |
| VA | -1.849 | -117.4 | 2.381 | 17080 |  |  |  |  |  |
| MST | -7341 | 1899 | 18.53 |  |  |  |  |  |  |
| Bartle | 2464 | -5639 | 3.502 |  |  |  |  |  |  |
| Yu | 0.0008931 | -2.838e-006 | 2.422e-009 | 6.537e-009 | -4.104e-006 | 4.66e-009 |  |  |  |
| Gordillo | 49.1 | -0.3667 | 0.0005027 | 0.0001292 | -0.006962 | -4.222e-005 |  |  |  |
| Jouyban | -50.59 | 0.1705 | -0.0004777 | 0.0002321 | 7.215 | 6.859 |  |  |  |
| Jafari Nejad | -18.47 | 6.624e-006 | 7.631e-005 | 3.852 |  |  |  |  |  |
| Proposed | -4319 | 0.02019 | -0.009917 |  |  |  | 2.404 | 0.000611 |  |
| 2 | Chrastil | 17.19 | -2340 |  |  |  |  |  |  | 3.646 |
| VA | 9.879 | -139.7 | 3.061 | 17040 |  |  |  |  |  |
| MST | -12190 | 2020 | 45.97 |  |  |  |  |  |  |
| Bartle | 2013 | -5815 | 2.841 |  |  |  |  |  |  |
| Yu | -3.051 | 0.04003 | -9.594e-005 | -1.217e-005 | -0.01316 | 4.271e-005 |  |  |  |
| Gordillo | -42.02 | 0.3209 | -0.0006774 | 0.0007781 | -0.1679 | -0.0001654 |  |  |  |
| Jouyban | 13.07 | -0.2282 | 8.855e-005 | 0.0005475 | -2.681 | 3.328 |  |  |  |
| Jafari Nejad | -18.75 | -2.907e-005 | 0.0002218 | 7.165 |  |  |  |  |  |
| Proposed | -83.03 | -0.009976 | 0.01679 |  |  |  | 7.92 | -0.05683 |  |
| 3 | Chrastil | 17.31 | -2378 |  |  |  |  |  |  | 3.62 |
| VA | 9.842 | -130.1 | 3.029 | 17040 |  |  |  |  |  |
| MST | -12270 | 2003 | 46.19 |  |  |  |  |  |  |
| Bartle | 1989 | -5824 | 2.806 |  |  |  |  |  |  |
| Yu | -0.2259 | 0.04053 | -9.77e-005 | -1.216e-005 | -0.03172 | 7.286e-005 |  |  |  |
| Gordillo | -8.692 | 0.05047 | -0.0002217 | 0.0006683 | -0.1554 | -0.0001196 |  |  |  |
| Jouyban | 20.65 | -0.2918 | 0.000295 | 0.0004235 | -5.881 | 0.7847 |  |  |  |
| Jafari Nejad | -24.19 | -2.596e-005 | 0.0001795 | 5.485 |  |  |  |  |  |
| Proposed | -2015 | -0.0322 | 0.02951 |  |  |  | 7.806 | -0.05089 |  |
| 4 | Chrastil | 9.474 | -4313 |  |  |  |  |  |  | 6.46 |
| VA | -4.831 | 91.77 | 5.295 | -17080 |  |  |  |  |  |
| MST | -4866 | 2111 | 7.856 |  |  |  |  |  |  |
| Bartle | 3658 | -4949 | 5.216 |  |  |  |  |  |  |
| Yu | -3.73e-006 | -2.74e-008 | 7.036e-012 | 1.046e-010 | 3.628e-008 | -8.168e-011 |  |  |  |
| Gordillo | -23.03 | 0.2586 | -0.000882 | 0.001776 | -0.3945 | -0.0004798 |  |  |  |
| Jouyban | 14.46 | -0.498 | 0.0003009 | 0.001032 | -2.859 | 11.11 |  |  |  |
| Jafari Nejad | -22.68 | -5.505e-005 | 0.0001195 | 7.809 |  |  |  |  |  |
| Proposed | 292.5 | -0.1725 | 0.1375 |  |  |  | 20.43 | -0.1331 |  |
| 5 | Chrastil | 16.12 | -5288 |  |  |  |  |  |  | 6.43 |
| VA | 4.608 | -1269 | 5.64 | -16.37 |  |  |  |  |  |
| MST | -5183 | 2471 | 13.48 |  |  |  |  |  |  |
| Bartle | 3630 | -4970 | 5.168 |  |  |  |  |  |  |
| Yu | 15.86 | -20.5 | -0.2639 | 0.4498 | -1.594 | -0.1358 |  |  |  |
| Gordillo | -9.686 | 0.0002546 | -6.913e-005 | 0.0001908 | -0.02017 | -6.273e-005 |  |  |  |
| Jouyban | 4.271 | -0.07328 | 4.319e-005 | 9.83e-005 | -5.141 | 0.7203 |  |  |  |
| Jafari Nejad | -14.53 | -1.58e-006 | 5.814e-005 | 5.733 |  |  |  |  |  |
| Proposed | 2088 | -0.02301 | 0.01155 |  |  |  | 9.454 | -0.03239 |  |
| 6 | Chrastil | 9.545 | -3431 |  |  |  |  |  |  | 4.189 |
| VA | -0.7775 | 78.72 | 3.1 | -17080 |  |  |  |  |  |
| MST | -3324 | 1586 | 6.562 |  |  |  |  |  |  |
| Bartle | 2946 | -4556 | 4.195 |  |  |  |  |  |  |
| Yu | -0.00022 | -6.42e-007 | -1.381e-010 | 2.367e-009 | 1.495e-006 | -2.567e-009 |  |  |  |
| Gordillo | -18.79 | 0.03731 | -9.957e-005 | 0.0001709 | -0.000818 | -0.0001145 |  |  |  |
| Jouyban | 4.027 | -0.07985 | 7.846e-005 | 6.32e-005 | -3.943 | -0.8135 |  |  |  |
| Jafari Nejad | -13.28 | -1.621e-005 | 4.675e-005 | 4.361 |  |  |  |  |  |
| Proposed | -1842 | -0.0367 | 0.01912 |  |  |  | 6.756 | -0.03022 |  |
| 7 | Chrastil | 4.697 | 1250 |  |  |  |  |  |  | 0.1616 |
| VA | 8.507 | 109.3 | 0.6626 | -17080 |  |  |  |  |  |
| MST | -6288 | 1645 | 29.06 |  |  |  |  |  |  |
| Bartle | 2482 | -5631 | 3.508 |  |  |  |  |  |  |
| Yu | 10.13 | 0.2091 | -0.0004803 | -9.183e-006 | -0.1732 | 0.0002857 |  |  |  |
| Gordillo | 39.32 | -0.2366 | 0.0003247 | 9.403e-005 | 0.01498 | -8.098e-005 |  |  |  |
| Jouyban | -19.81 | 0.1008 | -0.0002964 | 0.0001493 | 3.645 | 3.661 |  |  |  |
| Jafari Nejad | -3.431 | -1.154e-006 | 6.918e-005 | 3.578 |  |  |  |  |  |
| Proposed | -1061 | 0.05443 | -0.03624 |  |  |  | 0.2031 | 0.004263 |  |
| 8 | Chrastil | 12.48 | -5172 |  |  |  |  |  |  | 4.123 |
| VA | -3.212 | -254.1 | 0.4097 | 17080 |  |  |  |  |  |
| MST | -5581 | 1616 | 10.83 |  |  |  |  |  |  |
| Bartle | 2626 | -5566 | 3.736 |  |  |  |  |  |  |
| Yu | 0.0003365 | -7.419e-007 | 4.625e-010 | 1.579e-009 | -1.462e-006 | 1.586e-009 |  |  |  |
| Gordillo | -1.596 | -0.06903 | 8.489e-005 | 8.819e-005 | -0.01931 | -5.663e-006 |  |  |  |
| Jouyban | -20.88 | 0.006642 | -3.84e-005 | 8e-005 | 1.871 | 1.67 |  |  |  |
| Jafari Nejad | -17.38 | 9.482e-006 | 3.922e-005 | 1.82 |  |  |  |  |  |
| Proposed | -4690 | 0.01435 | -0.007453 |  |  |  | 1.536 | 0.006697 |  |
| 9 | Chrastil | 28.12 | -9119 |  |  |  |  |  |  | 10.49 |
| VA | 2.214 | 70.08 | 8.773 | -17080 |  |  |  |  |  |
| MST | -7088 | 3951 | 19.3 |  |  |  |  |  |  |
| Bartle | 3622 | -4976 | 5.161 |  |  |  |  |  |  |
| Yu | -8.315e-005 | -5.814e-007 | 1.691e-009 | -9.064e-011 | 7.23e-007 | -9.455e-010 |  |  |  |
| Gordillo | -28.24 | 0.01885 | -5.186e-005 | 7.551e-005 | 0.06686 | -0.0001196 |  |  |  |
| Jouyban | -16.16 | 0.0278 | -3.388e-005 | 2.722e-005 | -2.452 | -0.3752 |  |  |  |
| Jafari Nejad | -18.15 | 1.938e-005 | 6.892e-005 | 7.545 |  |  |  |  |  |
| Proposed | -4907 | 0.01999 | -0.00326 |  |  |  | 5.937 | -0.002312 |  |
| 10 | Chrastil | 14.1 | -4291 |  |  |  |  |  |  | 8.394 |
| VA | 1.911 | 57 | 7.592 | -17060 |  |  |  |  |  |
| MST | -2898 | 3170 | 7.025 |  |  |  |  |  |  |
| Bartle | 4570 | -4122 | 6.515 |  |  |  |  |  |  |
| Yu | 0.0001709 | 7.9e-008 | 1.161e-009 | -1.246e-009 | -9.247e-007 | 1.479e-009 |  |  |  |
| Gordillo | 20.68 | -0.1951 | 0.0001873 | 0.0001459 | 0.03399 | -0.000126 |  |  |  |
| Jouyban | -10.01 | 0.002124 | -2.136e-005 | 3.556e-005 | -1.448 | 3.275 |  |  |  |
| Jafari Nejad | -12.74 | -1.499e-006 | 4.266e-005 | 7.536 |  |  |  |  |  |
| Proposed | -4005 | 0.03247 | -0.02054 |  |  |  | 5.137 | 0.01431 |  |
| 11 | Chrastil | 23.16 | -7057 |  |  |  |  |  |  | 7.159 |
| VA | 1.332 | -132.1 | 4.979 | 17080 |  |  |  |  |  |
| MST | -6431 | 2574 | 18.45 |  |  |  |  |  |  |
| Bartle | 3147 | -5289 | 4.477 |  |  |  |  |  |  |
| Yu | 6.516e-005 | -3.406e-006 | 5.24e-009 | 6.768e-009 | 9.588e-007 | -2.82e-009 |  |  |  |
| Gordillo | 51.13 | -0.3771 | 0.0004677 | 0.0002114 | 0.04124 | -0.0002338 |  |  |  |
| Jouyban | -15.6 | 0.02077 | -0.0001609 | 0.0001461 | 0.03636 | 3.267 |  |  |  |
| Jafari Nejad | -17.04 | -3.392e-005 | 0.0001116 | 8.09 |  |  |  |  |  |
| Proposed | -4303 | 0.06129 | -0.05241 |  |  |  | 4.283 | 0.006633 |  |
| 12 | Chrastil | 12.8 | -5087 |  |  |  |  |  |  | 3.449 |
| VA | -2.925 | -151.4 | 2.02 | 17080 |  |  |  |  |  |
| MST | -6727 | 1310 | 15.02 |  |  |  |  |  |  |
| Bartle | 2247 | -5729 | 3.193 |  |  |  |  |  |  |
| Yu | 0.000333 | -5.257e-007 | 8.108e-011 | 1.597e-009 | -1.774e-006 | 2.318e-009 |  |  |  |
| Gordillo | 15.43 | -0.1528 | 0.0001862 | 0.0001977 | -0.05192 | -1.243e-005 |  |  |  |
| Jouyban | -13.57 | -0.04477 | 8.981e-008 | 0.0001519 | 0.4158 | 1.742 |  |  |  |
| Jafari Nejad | -18.47 | 4.387e-006 | 6.033e-005 | 1.809 |  |  |  |  |  |
| Proposed | -3237 | -0.01856 | 0.01229 |  |  |  | 4.251 | -0.01671 |  |
| 13 | Chrastil | 18.26 | -6159 |  |  |  |  |  |  | 4.71 |
| VA | 0.9404 | -714.5 | 3.138 | 16660 |  |  |  |  |  |
| MST | -7682 | 1732 | 20.03 |  |  |  |  |  |  |
| Bartle | 2524 | -5613 | 3.587 |  |  |  |  |  |  |
| Yu | 0.002341 | -3.277e-006 | 3.959e-010 | 1.028e-008 | -1.268e-005 | 1.676e-008 |  |  |  |
| Gordillo | 17.24 | -0.1424 | 0.0001326 | 0.0002764 | -0.06113 | -4.047e-005 |  |  |  |
| Jouyban | -6.741 | -0.07242 | 2.207e-005 | 0.000181 | -0.9121 | 2.263 |  |  |  |
| Jafari Nejad | -18.59 | 1.025e-006 | 8.445e-005 | 3.549 |  |  |  |  |  |
| Proposed | -2728 | -0.01646 | 0.01089 |  |  |  | 6.035 | -0.02396 |  |
| 14 | Chrastil | 15.01 | -6094 |  |  |  |  |  |  | 4.478 |
| VA | -3.117 | 15.2 | 3.604 | -17080 |  |  |  |  |  |
| MST | -6878 | 1663 | 14.62 |  |  |  |  |  |  |
| Bartle | 2482 | -5631 | 3.531 |  |  |  |  |  |  |
| Yu | 0.0001172 | -1.963e-007 | 3.454e-011 | 5.818e-010 | -6.002e-007 | 7.465e-010 |  |  |  |
| Gordillo | -13.18 | -0.005035 | -2.675e-005 | 0.0001645 | -0.02697 | -3.795e-005 |  |  |  |
| Jouyban | -15.11 | -0.02755 | -1.716e-005 | 0.0001238 | -0.06141 | 1.293 |  |  |  |
| Jafari Nejad | -20.12 | 3.519e-006 | 6.856e-005 | 3.002 |  |  |  |  |  |
| Proposed | -3981 | -0.008999 | 0.006629 |  |  |  | 4.155 | -0.01243 |  |
| 15 | Chrastil | 18.8 | -7367 |  |  |  |  |  |  | 5.733 |
| VA | 3.656 | -2148 | 4.46 | -20.33 |  |  |  |  |  |
| MST | -7197 | 2175 | 15.94 |  |  |  |  |  |  |
| Bartle | 2698 | -5531 | 3.841 |  |  |  |  |  |  |
| Yu | -59.81 | -12.9 | -8.706 | 11.92 | -2.031 | -3.935 |  |  |  |
| Gordillo | -9.721 | -0.07184 | 8.301e-005 | 0.0001196 | 0.03539 | -0.0001274 |  |  |  |
| Jouyban | -62 | 0.1755 | -0.0003176 | 0.0001285 | 12.46 | 8.355 |  |  |  |
| Jafari Nejad | -21.52 | -1.823e-005 | 0.0001055 | 7.465 |  |  |  |  |  |
| Proposed | -6831 | 0.07026 | -0.04423 |  |  |  | 0.1438 | 0.02822 |  |
| 16 | Chrastil | 17.31 | -5880 |  |  |  |  |  |  | 8.809 |
| VA | 0.5472 | 80.78 | 7.703 | -17060 |  |  |  |  |  |
| MST | -4343 | 3331 | 10.4 |  |  |  |  |  |  |
| Bartle | 4109 | -4581 | 5.858 |  |  |  |  |  |  |
| Yu | -1.03e-005 | -3.493e-007 | 4.932e-010 | 5.059e-010 | 2.316e-007 | -4.516e-010 |  |  |  |
| Gordillo | -23.66 | 0.04724 | -0.0001618 | 0.0002642 | 0.005098 | -0.0001567 |  |  |  |
| Jouyban | -8.82 | -0.02718 | -2.72e-005 | 0.0001083 | -1.745 | 4.162 |  |  |  |
| Jafari Nejad | -15.37 | -1.263e-005 | 6.834e-005 | 9.05 |  |  |  |  |  |
| Proposed | -4402 | 0.03434 | -0.02467 |  |  |  | 6.5 | 0.005341 |  |
| 17 | Chrastil | 12.97 | -3543 |  |  |  |  |  |  | 4.158 |
| VA | 1.795 | -9.322 | 3.023 | 0.311 |  |  |  |  |  |
| MST | -4054 | 1465 | 12.11 |  |  |  |  |  |  |
| Bartle | 2983 | -5128 | 4.24 |  |  |  |  |  |  |
| Yu | -3.545 | 1.747 | -1.757 | 1.65 | 1.434 | -0.3855 |  |  |  |
| Gordillo | 30.28 | -0.1754 | 0.0001189 | 0.0005167 | -0.0984 | -0.0001867 |  |  |  |
| Jouyban | -1.418 | -0.1284 | -3.234e-005 | 0.0003565 | -0.3244 | 5.297 |  |  |  |
| Jafari Nejad | -14.31 | -6.955e-005 | 0.0001156 | 7.126 |  |  |  |  |  |
| Proposed | -344.4 | -0.05958 | 0.03801 |  |  |  | 8.582 | -0.05091 |  |
| 18 | Chrastil | 10.02 | -3888 |  |  |  |  |  |  | 4.241 |
| VA | 0.6668 | -939.7 | 3.269 | -143.2 |  |  |  |  |  |
| MST | -4365 | 1490 | 8.724 |  |  |  |  |  |  |
| Bartle | 2984 | -5382 | 4.247 |  |  |  |  |  |  |
| Yu | -30.5 | -1.266 | -1.89 | 1.764 | -0.1491 | -0.4008 |  |  |  |
| Gordillo | 10.29 | -0.0954 | 3.788e-005 | 0.0003802 | -0.07994 | -9.917e-005 |  |  |  |
| Jouyban | -11.11 | -0.08155 | -3.542e-005 | 0.0002716 | 0.5312 | 4.402 |  |  |  |
| Jafari Nejad | -16.95 | -2.755e-005 | 7.578e-005 | 4.748 |  |  |  |  |  |
| Proposed | -1681 | -0.06815 | 0.05373 |  |  |  | 7.238 | -0.04004 |  |
| 19 | Chrastil | -1.411 | 3246 |  |  |  |  |  |  | 1.056 |
| VA | 9.199 | -98.33 | 1.659 | 16650 |  |  |  |  |  |
| MST | -9098 | 1471 | 36.09 |  |  |  |  |  |  |
| Bartle | 1959 | -5834 | 2.762 |  |  |  |  |  |  |
| Yu | -50.98 | 0.04349 | -0.000114 | -1.193e-005 | 0.2887 | -0.0004304 |  |  |  |
| Gordillo | -64.5 | 0.4372 | -0.0007975 | 0.0005462 | -0.1069 | -0.0001541 |  |  |  |
| Jouyban | 11.56 | -0.1677 | 7.813e-005 | 0.0003761 | -2.312 | 1.647 |  |  |  |
| Jafari Nejad | -13.67 | -3.274e-005 | 0.0001714 | 5.404 |  |  |  |  |  |
| Proposed | -112.2 | 0.001007 | 0.003812 |  |  |  | 5.032 | -0.03853 |  |
| 20 | Chrastil | 14.43 | -5097 |  |  |  |  |  |  | 5.491 |
| VA | -0.7271 | -116.8 | 3.852 | 17080 |  |  |  |  |  |
| MST | -4823 | 2067 | 11.16 |  |  |  |  |  |  |
| Bartle | 3234 | -5236 | 4.604 |  |  |  |  |  |  |
| Yu | 0.0006251 | -1.392e-006 | 1.071e-009 | 3.126e-009 | -2.837e-006 | 3.18e-009 |  |  |  |
| Gordillo | 35.09 | -0.2826 | 0.0003499 | 0.0001238 | 0.0296 | -0.0001316 |  |  |  |
| Jouyban | -11.92 | -0.007156 | -5.617e-005 | 9.388e-005 | -0.6846 | 1.849 |  |  |  |
| Jafari Nejad | -15.35 | -1.895e-005 | 6.737e-005 | 5.814 |  |  |  |  |  |
| Proposed | -3703 | 0.01708 | -0.01522 |  |  |  | 4.32 | -0.002146 |  |
| 21 | Chrastil | 10.76 | -4188 |  |  |  |  |  |  | 4.687 |
| VA | 10.73 | -4180 | 4.685 | -33.05 |  |  |  |  |  |
| MST | -4558 | 1649 | 9.175 |  |  |  |  |  |  |
| Bartle | 3086 | -5324 | 4.393 |  |  |  |  |  |  |
| Yu | -19.83 | 6.684 | -6.591 | 6.17 | 5.114 | -1.438 |  |  |  |
| Gordillo | 10.29 | -0.05318 | -8.791e-005 | 0.0006344 | -0.1716 | -7.744e-005 |  |  |  |
| Jouyban | -2.859 | -0.1959 | 8.44e-005 | 0.0004416 | -0.01283 | 6.56 |  |  |  |
| Jafari Nejad | -17.93 | -3.551e-005 | 8.807e-005 | 5.672 |  |  |  |  |  |
| Proposed | 138.7 | -0.1447 | 0.1178 |  |  |  | 11.46 | -0.07981 |  |
| 22 | Chrastil | 16.52 | -6137 |  |  |  |  |  |  | 5.034 |
| VA | -3.278 | 72.15 | 3.844 | -17080 |  |  |  |  |  |
| MST | -7713 | 1719 | 17.9 |  |  |  |  |  |  |
| Bartle | 2563 | -5595 | 3.646 |  |  |  |  |  |  |
| Yu | 0.0001377 | -3.483e-007 | 2.439e-010 | 1.03e-009 | -7.202e-007 | 9.206e-010 |  |  |  |
| Gordillo | -0.7007 | 0.02384 | -0.0002727 | 0.0007885 | -0.1866 | -0.0001268 |  |  |  |
| Jouyban | -14.56 | -0.1612 | -4.695e-005 | 0.000561 | 1.154 | 7.173 |  |  |  |
| Jafari Nejad | -22.99 | -9.215e-006 | 0.0001144 | 4.831 |  |  |  |  |  |
| Proposed | -2256 | -0.05736 | 0.0433 |  |  |  | 11.4 | -0.05866 |  |
| 23 | Chrastil | 23.11 | -8695 |  |  |  |  |  |  | 5.374 |
| VA | -4.364 | -128.5 | 1.872 | 17080 |  |  |  |  |  |
| MST | -8922 | 1955 | 20.8 |  |  |  |  |  |  |
| Bartle | 2169 | -5759 | 3.085 |  |  |  |  |  |  |
| Yu | 0.0002026 | -5.346e-007 | 3.969e-010 | 1.249e-009 | -9.702e-007 | 1.157e-009 |  |  |  |
| Gordillo | 30.75 | -0.286 | 0.0003953 | 0.0001678 | -0.00846 | -7.547e-005 |  |  |  |
| Jouyban | -42.63 | 0.1064 | -0.0003636 | 0.000243 | 4.789 | 4.593 |  |  |  |
| Jafari Nejad | -23.16 | 1.214e-006 | 9.881e-005 | 4.256 |  |  |  |  |  |
| Proposed | -5314 | 0.02551 | -0.0159 |  |  |  | 2.666 | -0.002012 |  |
| 24 | Chrastil | 8.899 | -3489 |  |  |  |  |  |  | 3.352 |
| VA | -1.45 | -122.3 | 2.198 | 17080 |  |  |  |  |  |
| MST | -3932 | 1319 | 7.381 |  |  |  |  |  |  |
| Bartle | 2442 | -4832 | 3.474 |  |  |  |  |  |  |
| Yu | 0.000652 | -1.494e-006 | 7.724e-010 | 3.928e-009 | -3.06e-006 | 3.399e-009 |  |  |  |
| Gordillo | 8.239 | -0.1073 | 0.0001251 | 0.0001045 | -0.03013 | 1.586e-005 |  |  |  |
| Jouyban | -18.05 | 0.01081 | -5.82e-005 | 8.568e-005 | 0.9316 | 1.849 |  |  |  |
| Jafari Nejad | -14.17 | 3.414e-005 | 6.87e-006 | -0.08465 |  |  |  |  |  |
| Proposed | -3859 | -0.002532 | 0.01092 |  |  |  | 0.4307 | 0.009932 |  |
| 25 | Chrastil | 11.2 | -4205 |  |  |  |  |  |  | 3.258 |
| VA | -0.6378 | -183.4 | 2.525 | 17080 |  |  |  |  |  |
| MST | -4465 | 1202 | 9.062 |  |  |  |  |  |  |
| Bartle | 2325 | -5439 | 3.305 |  |  |  |  |  |  |
| Yu | 0.0003263 | -2.128e-007 | -3.977e-010 | 1.381e-009 | -1.841e-006 | 2.4e-009 |  |  |  |
| Gordillo | -10.35 | -0.04946 | 8.849e-005 | -1.49e-005 | 0.05099 | -8.69e-005 |  |  |  |
| Jouyban | -10.31 | 0.009287 | -2.057e-005 | 1.176e-006 | -2.074 | -2.539 |  |  |  |
| Jafari Nejad | -15.44 | -1.388e-005 | 5.708e-005 | 3.312 |  |  |  |  |  |
| Proposed | -4578 | 0.04038 | -0.03123 |  |  |  | 0.6396 | 0.01618 |  |
| 26 | Chrastil | 57.53 | -11890 |  |  |  |  |  |  | 10.52 |
| VA | 14.87 | -169.3 | 6.839 | 17060 |  |  |  |  |  |
| MST | -2106 | 4073 | 29.27 |  |  |  |  |  |  |
| Bartle | 2927 | -5414 | 4.155 |  |  |  |  |  |  |
| Yu | 0.0008984 | 1.165e-005 | 5.977e-008 | -3.246e-008 | -5.294e-006 | 7.669e-009 |  |  |  |
| Gordillo | 67.03 | -0.4535 | 0.0005191 | 0.001563 | 0.7252 | -0.0221 |  |  |  |
| Jouyban | -13.9 | 0.7496 | -0.02674 | 0.001911 | 0.2145 | 6.875 |  |  |  |
| Jafari Nejad | 12.7 | -0.008317 | 0.0002937 | 20.45 |  |  |  |  |  |
| Proposed | -3694 | 1.413 | -8.376 |  |  |  | 4.868 | 0.1108 |  |
| 27 | Chrastil | 19.74 | -7373 |  |  |  |  |  |  | 7.873 |
| VA | 2.625 | -1465 | 6.31 | -16.01 |  |  |  |  |  |
| MST | -6149 | 2974 | 13.52 |  |  |  |  |  |  |
| Bartle | 3392 | -5135 | 4.834 |  |  |  |  |  |  |
| Yu | -215.3 | -10.92 | -7.421 | 8.751 | -1.543 | -2.379 |  |  |  |
| Gordillo | 10.31 | -0.2022 | 0.0002746 | 2.043e-006 | 0.08084 | -0.0001152 |  |  |  |
| Jouyban | -40.8 | 0.1385 | -0.0002163 | 2.303e-005 | 3.895 | 2.797 |  |  |  |
| Jafari Nejad | -19.12 | 8.383e-006 | 6.309e-005 | 6.04 |  |  |  |  |  |
| Proposed | -8850 | 0.1398 | -0.0863 |  |  |  | -4.022 | 0.07934 |  |
| 28 | Chrastil | 6.584 | -3092 |  |  |  |  |  |  | 3.195 |
| VA | 6.585 | -3092 | 3.195 | 138.6 |  |  |  |  |  |
| MST | -3837 | 1131 | 5.804 |  |  |  |  |  |  |
| Bartle | 2300 | -4680 | 3.274 |  |  |  |  |  |  |
| Yu | 49.07 | -5.849 | -6.499 | 6.124 | -2.512 | -1.398 |  |  |  |
| Gordillo | 10.29 | -0.0978 | 5.984e-005 | 0.0003422 | -0.09019 | -4.542e-005 |  |  |  |
| Jouyban | -7.79 | -0.1059 | 4.509e-005 | 0.0002432 | -0.1537 | 3.171 |  |  |  |
| Jafari Nejad | -16.73 | -1.818e-005 | 5.682e-005 | 3.211 |  |  |  |  |  |
| Proposed | -1612 | -0.08283 | 0.0663 |  |  |  | 6.737 | -0.04194 |  |
| 29 | Chrastil | 20.44 | -7852 |  |  |  |  |  |  | 6.996 |
| VA | -1.559 | -138.1 | 5.525 | 17080 |  |  |  |  |  |
| MST | -6891 | 2648 | 15.34 |  |  |  |  |  |  |
| Bartle | 2992 | -5378 | 4.261 |  |  |  |  |  |  |
| Yu | 0.000178 | -2.837e-007 | 1.641e-010 | 6.265e-010 | -8.256e-007 | 9.599e-010 |  |  |  |
| Gordillo | 22.55 | -0.2414 | 0.0003019 | 0.0001306 | 0.0288 | -0.0001154 |  |  |  |
| Jouyban | -25.23 | 0.03742 | -0.0001181 | 0.0001073 | 0.9616 | 2.145 |  |  |  |
| Jafari Nejad | -19.97 | -6.529e-006 | 8.2e-005 | 6.64 |  |  |  |  |  |
| Proposed | -6243 | 0.05626 | -0.03557 |  |  |  | 2.252 | 0.01891 |  |
| 30 | Chrastil | 17.21 | -5880 |  |  |  |  |  |  | 8.809 |
| VA | 0.4463 | 80.77 | 7.703 | -17060 |  |  |  |  |  |
| MST | -4343 | 3331 | 10.4 |  |  |  |  |  |  |
| Bartle | 4109 | -4581 | 5.858 |  |  |  |  |  |  |
| Yu | -1.03e-005 | -3.493e-007 | 4.932e-010 | 5.059e-010 | 2.316e-007 | -4.516e-010 |  |  |  |
| Gordillo | -23.66 | 0.04724 | -0.0001618 | 0.0002642 | 0.005098 | -0.0001567 |  |  |  |
| Jouyban | -8.82 | -0.02718 | -2.72e-005 | 0.0001083 | -1.745 | 4.162 |  |  |  |
| Jafari Nejad | -15.37 | -1.263e-005 | 6.834e-005 | 9.05 |  |  |  |  |  |
| Proposed | -4402 | 0.03434 | -0.02467 |  |  |  | 6.5 | 0.005341 |  |
| \* Systems according to the numbers: 1- 1-methyl-amino-anthraquinone,2- 2-methyl-N-phenylacetamide, 3- 4-methyl-N-phenylacetamide,4- AC03,5- APAN,6- Blue 3,7- Blue 14,8- Blue 60,9- Blue 79,10- Blue 79:1,11- Blue 134,12- D1,13- D2,14- D3,15- DY82,16- Modified Yellow 119,17- Mordant Brown,18- Mordant Red 11,19- N-phenylacetamide,20- Orange 3,21- Orange 11,22- Photochromic Dye,23- Red 1,24- Red 60,25- Red 73,26- Red 82,27- Red 153,28- Yellow 7,29- Yellow 16,30- Yellow 119. | | | | | | | | | | |